

PATTERN-MATCHING PROCESSING METHOD AND  
IMAGE PROCESSING APPARATUS

ABSTRACT OF THE DISCLOSURE

The present invention relates to a pattern-matching processing method based on left and right images of an object photographed in stereo. A left area and a right area are generated, each having a fixed pattern containing plural pixels extracted from the left and right images, respectively, and in the left area, a reference image is generated by calculating an interpolation pixel value to be used between two transversely adjacent pixels based on the average of the two pixel values, and by calculating an interpolation pixel value to be used between two vertically adjacent pixels based on the average of the plural pixel values surrounding the relating position. Similarly, in the right area, interpolation pixel values are calculated and a comparison image is generated. Then pattern matching is performed between the reference image and the comparison images generated sequentially by shifting the right original image pixel by pixel.